CLAIMS

1) Device for mounting a by pass saddle hub (3) on a pipe, the saddle comprising at least two means of fixation or of fitting on the sides (14,15), the said saddle being a possibly saddle of by pass or closing tap (12) intended to be fixed in a way seals on the pipe, the device for mounting including a means of stressing of the saddle and the means of fixation being able to cooperate with the means of fixation of the said saddle, the means of stressing being an opened bracelet and deformable (4), the saddle (3) and the bracelet (4) forming a ring, characterized in that the means of fixation are arranged regularly of an extremity to the another of said bracelet so as to adapt itself to the various outside diameters of pipe by the connecting and the stressing of at least two means of fixation of the bracelet (4) to the means of fixation (14,15) of the saddle (3), the bracelet including mainly a strip and being installed by rotation on the saddle (3), the means of rotation including at least a rotator mobile part of locking drilled and tapped installed sliding and turning in at least an extremity of the bracelet.

2) Device according to the previous claim, characterized in that the by pass saddle (3) of the pipe particularly loads presents greatly in it middle an outing opening (8) of radial axis with regard to the axis of the pipe, a supple joint (10) surmounted by a muff (9) being adjusted in the opening, a second joint (11) being placed in the continuation of the muff (9) in the contact of the means of fixation of the connection of the by pass pipe (12), means such as a tapping, the two joints (10,11) and the muff (9) presenting an internal diameter greatly upper than the diameter of drilling to form a by pass to the pipe.

3) Device according to the claim 1, characterized in that waterproofness between the ring and pipe (2) is insured by a one block joint with lips of with presenting a concave lower face (35) a curve in at least equal to the curve of the pipe (2), its peripheral part (36) presenting one exceeding line (37) separating it in at least two faces (38 , 39), the upper face (40) of the joint being confused with a curve giving it a bulged aspect, the peripheral and upper faces (38 , 39 , 40) coming to be arranged in the foreseen print under

the sole of the saddle (3), the internal part (41) bounding the hollow of said joint presenting a opened inner angle separating at least two faces (42 , 43) of different inclinations, the upper face (42) having an upward position and the lower face (43) having an downward position the pressure of the fluid (P1) crossing the hollow of the lip joint be separated into constituents one (P2) in toward direction of the print top and another (P3) towards the surface of the pipe (2) by way of the outside faces of the joint, said joint being able of maintaining waterproofness with pipes (2a , 2b , 2c) of different diameters by variation of intensity and place of the pressure and the compression on the pipe (2a , 2b , 2c) with any diameter.

4) Device for mounting a by pass saddle (3) on a pipe, the saddle comprising at least two means of fixation or of stressing (14,15) on the sides, said saddle being possibly a saddle of by pass or closing tap(12) in view to be fixed in a way seals on the pipe, the device for mounting including a means of stressing of the saddle and means of fixation being able of cooperating with the means of fixation of said saddle, the means of stressing being an opened and deformable bracelet (4), the saddle (3) and the bracelet (4) forming a ring, characterized in that the means of fixation are arranged regularly from an extremity to the another of said bracelet so as to adapt itself to the various outside diameters of pipe by the connecting and the stressing of at least two means of fixation of the bracelet (4) with the means of fixation (14,15) of the saddle (3), the bracelet being arranged following a rotation on the saddle (3), an extremity of the bracelet being pulled down closed around a mobile locking part, drilled and tapped functioning as a nut (7) of cylindrical shape allowing to slide and to turn in the pulled portion of the extremity of said bracelet, the screw (5) coming to settle of one hand in the cylindrical nut (7) after having crossed a opening placed at the end of the pulled portion of the bracelet, on the other hand, the head of the screw (5) having to go down in and to stress it on two fingers arranged in shape of fork (15) to constitute a lateral means of fixation of the saddle.

5) Device according to the previous claim, characterized in that the bracelet being mounted by a rotation on the saddle (3) by a pulled down closed an extremity of the

bracelet around the mobile locking piece leaky and tapped forming the cylindrical nut (7) which combined with a means of reversible fixation such as one screw (5) shaped of a T one of the side being one of means of fixation (14,15) of the saddle (3), an opening of the bracelet arranging itself at the extremity of the pulled down to allow the passage of the part of connecting of the T of the saddle (3), the means of reversible fixation such as the screw (5) crossing another opening placed in its extremity closer of limit bracelet, said screw having to fix the extremity of the bracelet by means of fixation of the saddle.

6) Device according to one of claims 4 or 5, characterized in that the means of fixation of the bracelet from a first extremity is or includes openings(24) being able of a possible crossing and locking of the means of fixation of the saddle, the means of fixation being arranged bit by bit from the other extremity of said bracelet.

7) Device according to one of claims 4 - 6, characterized in that the means for arranging the opened and deformable bracelet include or is elongated openings (24) arranged longitudinally with regard to the length of the bracelet, in particular pulled downs closed extremity of the bracelet (4) being arranged on the face of the bracelet intended to be tightened on the pipe so as to pinch at least one pulled down between said pipe and the outside edges of the bracelet (4), typically the slice (6) presenting a flat face and the other face of convex shape being mounted on the screw (5), the flat surface with contact of the head of screw (5) and the convex surface cooperating with a hollow convex imprint arranged in the hollow of the fork (15).

8) Device according to one of claims 4 - 7, the saddle (3) being particularly make bronze, characterized in that the bracelet includes mainly a strip made with not oxidable material (4) in particular a metallic band coating with sluggish material such as a composition based of powder of epoxy.

9) Method for mounting of a device of connection of an auxiliary pipe of by pass on a load or not supply water pipe, characterized in that said pipe having so well

diameter, lower than the distance separating the two side means of fixation of the saddle (2a), greatly equal to the distance separating the two side means of fixation of the saddle (2b) that upper than the distance separating the two side means of fixation of the saddle (2c), it includes at least the following successive stages:

- preparation of a ring (1) corresponding to one of claims 1 - 8, bracelet being put in length following of the diameter of the pipe (2a , 2b , 2c),
- presentation and shaping of the ring (1) on the pipe, - stressing of the set in position of functioning,
- screwing and stressing of the device of connection on the saddle,
- waterproof assembly of a device to drill (29) outing of a bit on it upper opening (28) of the hollow of the device of connection,
- drilling of the pipe,
- dismantling of the device to drill (29),
- lock of the device of connection,
- connecting the system of by pass to the auxiliary pipe.

10) Method according to the previous claim, characterized in that the shaping of the ring (1) on the pipe is obtained by an assembly in rotation, the stressing of the set in position of functioning being made with a single tool.

11) tap (12) of by pass of pipe including a body (25) and one saddle (3), the body and the saddle being realized in a single set monoblock and / or in one piece and comprising at least two side means of fixation (14,15), the means of fixation (14 , 15) being radial nerves with regard to the axis of the body of the tap (12), placing itself greatly in contrast one of the another one and being provided with a device for mounting on the pipe, characterized in that said device is such as one of claims 1 - 8.